We Claim:

1. A composition comprising transduced myeloid-committed stem cells in a biological carrier medium.

2. A composition as claimed in claim 1, wherein said transduced myeloid committed stem cells contain an exogenous nucleic acid encoding a beneficial myeloid specific protein selected from the group consisting of glucocerebrosidase, hexosaminidase A, iduronate-2-sulphatase, sphingomyelinase and arylsulfatase A.

3. A composition as claimed in claim 2 wherein said exogenous nucleic acid is operably linked to a myeloid specific promoter.

4. A vector suitable for the treatment of Gauchers disease as shown in Figure 8.

5. A composition comprising a vector suitable for transducing myeloid specific stem cells, said vector containing a coding region for a protein selected from the group consisting of glucocerebrosidase, hexosaminidase A, iduronate-2-sulphatase, sphingomyelinase and arylsulfatase A in a biological carrier medium.

6. A composition comprising the vector of Figure 8 in a biological carrier medium.

7. A method for expressing exogenous nucleic acids in myeloid-committed stem cells comprising:

a) obtaining myeloid-committed stem cells;

and

b) contacting said cells with a retroviral vector containing at least one nucleic acid encoding a myeloid specific protein, under conditions whereby said vector enters cells and expresses a protein encoded by said at least one nucleic acid.

8. A method as claimed in claim 7, wherein said at least one nucleic acid encoding a myeloid specific protein is operably linked to a myeloid cell specific promoter.

9. A method as claimed in claim 8, wherein said cells expressing said myeloid specific protein are introduced into a recipient test subject.

10. A method as claimed in claim 8 for the treatment of Tay Sachs disease wherein said myeloid specific stem cells express hexosaminidase A.

11. A method as claimed in claim 8 for the treatment of Niemann-Pick disease wherein said myeloid specific stem cells express sphingomyelinase.

12. A method as claimed in claim 8 for the treatment of Gauchers disease, wherein said myeloid specific stem cells express glucocerebrosidase.

13. A method as claimed in claim 8 for the treatment of Hunter Syndrome, wherein said myeloid specific stem cells express iduronate-2 sulphatase gene.

14. A method as claimed in claim 8, for the

treatment of metachromatic leukodystrophy, wherein said myeloid specific stem cells express arylsulfatase A.

15. A method of potentiating the immune response to a pre-determined antigen comprising:

a) providing a myeloid specific stem cell population;

b) transducing said myeloid specific stem cell population with a retroviral vector containing an exogenous nucleic acid sequence encoding said antigen;

c) harvesting said transduced cells; and

d) reinfusing said transduced cells into a test subject.

16. A method as claimed in claim 15, wherein said antigen is a tumor antigen.

17. A method as claimed in claim 16, wherein said tumor antigen is selected from the group consisting of MAGE1 and MAGE3, tyrosinase, p21 Ras, CEA, Lewis, CD44, mut EGFR, EBNA-1, CD10, PSA, p53, BCR-able and mucin.

18. A method as claimed in claim 15, wherein said antigen is a viral antigen.

19. A method as claimed in claim 18, wherein said viral antigen is selected from the group consisting of gp120 from HIV, hepatitis B virus surface antigen, herpes simplex I viral antigen, herpes simplex II viral antigen and papilloma virus antigen.